

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017409**Date Inspected:** 09-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Xu Tao**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment & Bike Path**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 006896

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 13AE. The weld designations reviewed are as follows:

1. KP3005 - 001 - 001, 002, 004, 006
2. VP3002- 001- 001, 002, 003, 004

This QA Inspector observed the following work in progress:

Bay 14

This QA Inspector observed the following work in progress:

Submerged Arc Welding (SAW) welding of weld joint SEG3011-005 located on deck plate to deck plate splice joint of OBG Segment 13CE. Welder is identified as 044771. ZPMC Quality Control (QC) is identified as Mr. Wang Xu. The welding variables recorded by QC appeared to comply with the Applicable

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WPS-B-T-2221-B-L2c-S-2.

SAW welding of weld joint SEG3007-008 located on deck plate to deck plate splice joint of OBG Segment 13CE. Welder is identified as 058100. ZPMC Quality Control (QC) is identified as Mr. Wang Xu. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

SAW welding of weld joint SEG3020*-003 located on bottom plate to bottom plate splice joint of OBG Segment 14W. Welder is identified as 250050. ZPMC Quality Control (QC) is identified as Mr. Wang Xu. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

Flux Core Arc Welding (FCAW) welding of weld joint AP3001-001-057 and 058 located on Anchor plate stiffener of OBG segment 14E. Welder is identified as 044824. ZPMC Quality Control (QC) is identified as Mr. Zhong Guo hui. The welding variables recorded by QC appeared to comply with the Applicable WPS –B-T-2232-Tc-U4b-F.

FCAW welding of weld joint AP3011-001-001 and 004 located on Anchor plate stiffener of OBG segment 14E. Welder is identified as 067079. ZPMC Quality Control (QC) is identified as Mr. Zhong Guo hui. The welding variables recorded by QC appeared to comply with the Applicable WPS –B-T-2232-Tc-U4b-F.

Shielded Metal Arc Welding (SMAW) welding of weld joint OBE13C-002 located on bottom plate to side plate of OBG segment 13BE to 13CE. Welder is identified as 043661. ZPMC Quality Control (QC) is identified as Mr. Geng Wei. The welding variables recorded by QC appeared to comply with the Applicable WPS –B-T-2214-B-U2-FCM-1.

SMAW welding of weld joint SEG3014A-009 located on bottom plate to side plate of OBG segment 13BW. Welders are identified as 058100, 037996 and 043661. ZPMC Quality Control (QC) is identified as Mr. Wang Jie. The welding variables recorded by QC appeared to comply with the Applicable WPS –B-T-2214-B-U2-FCM-1.

SMAW welding of weld joint SEG3014A-009 located on bottom plate to side plate of OBG segment 13BW. Welders are identified as 067904 and 037840. ZPMC Quality Control (QC) is identified as Mr. Wang Jie. The welding variables recorded by QC appeared to comply with the Applicable WPS –B-T-2214-B-U2-FCM-1.

SMAW welding of weld joint SEG3014A-007 located on bottom plate to side plate of OBG segment 13BW. Welders are identified as 051348 and 045246. ZPMC Quality Control (QC) is identified as Mr. Wang Jie. The welding variables recorded by QC appeared to comply with the Applicable WPS –B-T-2214-B-U2-FCM-1.

SMAW welding of weld joint SEG3015A-012 located on bottom plate to side plate of OBG segment 13BW. Welders are identified as 045196 and 063226. ZPMC Quality Control (QC) is identified as Mr. Wang Jie. The welding variables recorded by QC appeared to comply with the Applicable WPS –B-T-2214-B-U2-FCM-1.

ZPMC personnel heat straightening OBG Segment 13AW member identified as FB3110A. Distortion appeared (8-9mm) to be caused by mishandling of the material. ZPMC Quality Control (QC) inspector identified as Mr. Geng Wei was present to monitor the heat straightening process. The heat straightening appeared to comply with HSR1 (B) number 9357.

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ZPMC personnel heat straightening OBG Segment 14W member identified as SEG3020*-006 and 003. Distortion appeared to be caused by mishandling/Storage of the material. ZPMC Quality Control (QC) inspector identified as Mr. Wang Jie was present to monitor the heat straightening process. The heat straightening appeared to comply with HSR1 (B) number 9535.

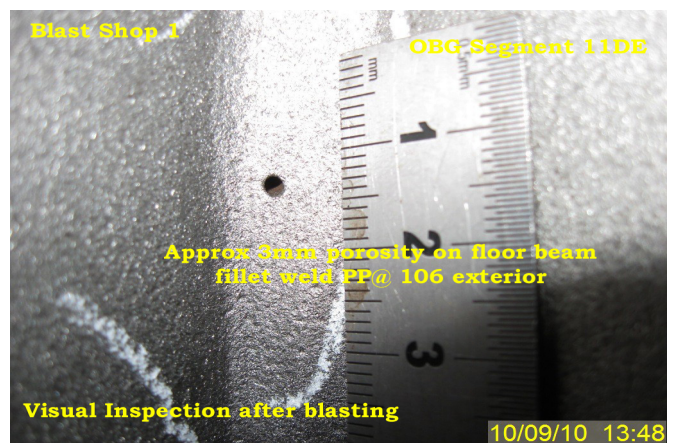
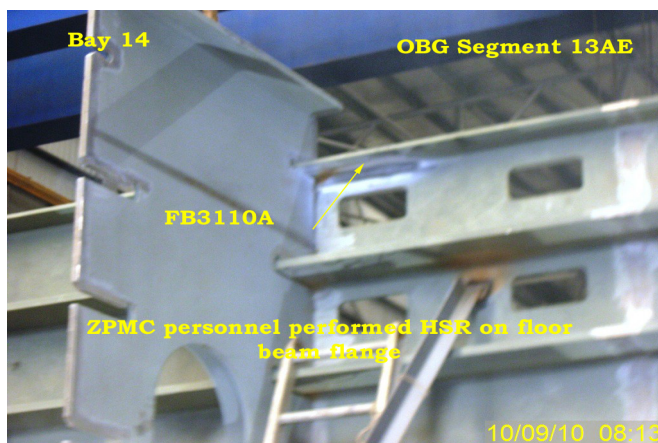
Description of Incident: During the Quality Assurance random work in progress and visual testing (VT) review of weld located on OBG Segment 13AE, this Quality Assurance Inspector (QA) observed that ZPMC personnel performing overhead crane to position plate SA3017B in position adjacent to floor beam FB3110A. This QA Inspector observed the top "T" flange of FB3110A appears to be distorted and the top "T" flange would not fit into the upper slot cut into SA3017B. ZPMC appears to have previously heat straightened the top "T" flange of floor beam FB3110A where the slot of plate SA3017A fits over the upper top "T" flange. ZPMC personnel heat straightening OBG Segment 13AW member identified as FB3110A. Distortion appeared to be caused by mishandling/Storage of the material. ZPMC Quality Control (QC) inspector identified as Mr. Geng Wei was present to monitor the heat straightening process. The heat straightening appeared to comply with HSR1 (B) number 9375. See the attached pictures.

Visual Inspection after Blast

OBG Segment 11DE

This QA Inspector performed a preliminary random visual inspection on OBG Segment 11DE, after the grit blast of the exterior components of the deck panel, floor beams and corner assemblies of this segment. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection. See the attached picture.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Vibin	Quality Assurance Inspector
Reviewed By:	McClendon,Timothy	QA Reviewer
